



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,048	11/29/2001	Eric Van Hensbergen	AUS920010613US1	6041

40412 7590 01/25/2005

IBM CORPORATION- AUSTIN (JVL)
C/O VAN LEEUWEN & VAN LEEUWEN
PO BOX 81641
AUSTIN, TX 78758-1641

EXAMINER

STRANGE, AARON N

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,048

Applicant(s)

HENSBERGEN, ERIC VAN

Examiner

Aaron Strange

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>112901,082902</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 15-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

3. With regard to claims 15-20, the limitation "a computer program product stored in a computer operable media" reads on non-statutory subject matter. The specification states that the instructions may be "downloaded via the Internet or other computer network." It would not be unreasonable to interpret such a definition to mean that the computer operable media may be a carrier wave or other non-statutory "transmission media". Since the claimed computer program product is not necessarily tangibly embodied on a computer readable medium, it is merely a manipulation of abstract ideas.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5,6,12,13,19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 5,12, and 19 recite the limitation "the first mapping table" in lines 2-3, 3-4, and 3-4, respectively. There is insufficient antecedent basis for this limitation in the claim. It is noted that claims 2, 9, and 16 provide antecedent basis for this limitation.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

8. Claims 1-20 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter.

9. With regard to claims 1-20, the documents cited as (W) ("KNITS: Switch-based Connection Hand-off") and (X) ("Athanasios E. Papathanasiou") on the Notice of References Cited included with this Office action provide evidence that the named inventor is not the sole inventor of the claimed subject matter. In particular see document (W) in its entirety and Page 2, Lines 3-7 of document (X).

10. Claims 1,7,8,14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. (US 6,826,613).

11. With regard to claims 1,8, and 15, Wang discloses a method, a connection splicing tool, and computer program product for splicing network connections, said comprising: receiving a first handoff request from a first node, wherein the first node is connected to a client node using a first connection (Col 7, Lines 10-14); identifying a second node based on a second node identifier, wherein the second node is connected to the first node using a second connection (Col 7, Lines 59-63); updating one or more connection tables with data corresponding to the first and second connections (Col 7, Line 63 to Col 8, Line 4); and redirecting one or more client packets sent over the first connection from the client node to the second node in response to the updated connection tables (Col 8, Lines 4-8).

12. With regard to claims 7 and 14, Wang further discloses redirecting one or more response packets sent by the second node over the second connection to the client node in response to the updated tables (the session proceeds between the second device and the client after handoff) (Col 8, Lines 2-8).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2,9, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 6,826,613). In view of La Porta et al. (US 6,763,007). In further view of Kovacs.

15. With regard to claims 2,9, and 16, while the system disclosed by Wang shows substantial features of the claimed invention (discussed above), it fails to disclose that updating further comprises writing a first entry to a first mapping table, the first entry including a client identifier corresponding to the client node, a first node identifier corresponding to the first node, and a pointer to a second mapping table; creating the second mapping table; and writing a second entry in the second mapping table, the second entry including the second node identifier.

La Porta teaches updating a routing table when a connection handoff has occurred. La Porta discloses writing an entry to a mapping table, the entry including a client identifier corresponding to the client node (IP of mobile device) (Fig 9, 314), a first node identifier corresponding to the first node (IP of old base-station) (Fig 9, 318), and a second node identifier (IP of new base-station) (Fig 9, 316) (Col 13, Lines 13-25 and Col 14, Lines 34-51). Updating the routing table with these parameters would be advantageous since it would allow subsequent packets to be properly forwarded to the

Art Unit: 2153

correct device following the handoff. La Porta fails to specifically disclose a pointer to a second mapping table where the second node identifier is stored.

Kovacs teaches the use of pointers to connect data structures together in a list. This allows dynamic allocation and de-allocation of space as needed for additional elements. This type of data structure would be advantageous for use in the system disclosed by Wang and La Porta since it would allow storage of routing information for any number of handoff requests without requiring the space to be allocated in advance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to write an entry to a first routing table comprising a client identifier and an identifier of the first node along with a pointer to a second routing table containing an identifier of the second node. This would have allowed any number of handoff requests to be recorded in the routing tables and maintain connectivity between the client and the node to which it is assigned.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

Art Unit: 2153

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANS 1/19/2005

Bradley Edelman
Art Unit 2153